ERDEY, Laszlo, prof., dr. (Budapest, XI., Gellert ter 4); SVEHLA, Gyula, dr. (Budapest, XI., Gellert ter 4)

Accuracy of silver determination by atomic absorption methods. Acta chimica Hung 41 no.1/2:187-194 '64.

1. Institute of General Chemistry of Budapest Technical University.

ERDEY, Laszlo, prof. dr. (Budapest, XI., Gellert ter 4); LIPTAY, Gyorgy, dr. (Budapest, XI., Gellert ter 4); DAVID, Peter (Budapest, II., Lovohaz u.39)

Derivatographic study of thermal decomposition of electrical insulating materials and insulators. Periodica polytechn electr 8 no. 3:242-250 '64.

1. Department for General Chemistry of the Polytechnical University, Budapest, and Research Institute for Electrical Industry, Budapest.
2. Editorial Board Member, "Periodica Polytechnica - Electrical Engineering" (for Erdey). Submitted February 10, 1964.

ERDEY, Laszlo, prof., dr. (Budapest, XI., Gellert ter 4); KASA, Imre, dr. (Budapest, XI., Gellert ter 4)

Examination of 2-hydroxy-4-amino-4'-methoxy-diphenylamine redox indicator. Acta chimica Hung 41 no.1/2:59-65 '64.

1. Institut fur Allgemeine Chemie der Technischen Universitat Budapest. 2. Mitglied, Redaktionskollegium, "Acta Chimica Academiae Scientiarum Hungaricae" (for Erdey).

LIPTAY, Gyorgy, dr okleveles vegyeszmernok, adjurktus; DAVID, Peter, okleveles vegyesz; ERDEY, Laszlo, dr., okleveles vegyesz, akademikus

Derivatographic analysis of the heat caused decomposition of electric insulators and insulations. Pt.1. Elektrotechnika 57 no.9:392-397 S '64.

1. Chair of General Chemistry, Budapest Technical University, Budapest XI., Gellert ter 3 (for Liptay). 2. Research Institute of Electric Industry, Budapest, VI., Nepkoztarsasag utja 32 (for David). 3. Head, Chair of General Chemistry, Budapest Technical University, Budapest XI., Gellert ter 3 (for Erdey).

L 63740-65 EWT(1)/IJP(c)

ACCESSION NR: AT5021739 HU/2502/64/041/01-/0037/0042

AUTHOR: Erdey, Laszlo(Erdei, L.)(Doctor, Professor)(Budapest); Buzas, Ilona (Buzash, I.)(Doctor)(Budapest); Takacs, Jozsef(Takach, Y.)(Budapest)

TITLE: Contribution to the luminescence mechanism of lucigenine

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 41, no. 1-2, 1964, 37-42

TOPIC TAGS: luminescence, light emission, laboratory optic instrument, catalysis

ABSTRACT: [German article] The luminescence of lucigenine was investigated under various experimental conditions with the aid of a modified Magnephot I microlumen meter. The lighting mechanism was found to be composed of two components, one reversible and the other irreversible. Catalysts such as ethyl alcohol, butyl alcohol, and osmium tetroxide, caused a shift in the ratio of these two components towards the irreversible. The emission of light without the presence of catalysts coincided with the formation of minute quantities of N-methylacridone.

Orig. art. has: 3 graphs.

Card 1/2

L 63740-65

ACCESSION NR: AT5021739

ASSOCIATION: Institut fur Allgemeine Chemie der Technischen Universitat, Budapest (Institute for General Chemistry at the Technical University)

SUBMITTED: 03May63 ENCL: 00 SUB CODE: OP, GC

NR REF SOV: 001 OTHER: 004 JPRS

Card 1/2

L 63681-65

ACCESSION NR: AT5021741 HU/2502/64/041/01-/0059/0065

AUTHOR: Erdey, Laszlo (Erdei, L.)(Professor, Doctor)(Budapest); Kasa, Imre (Kasha, I.)(Doctor)(Budapest)

TITLE: Investigation of the oxidation-reduction indicator 2-hydroxy-4-amino-4 prime-methoxy-diphenylamine

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 41, no. 1-2, 1964, 59-65

TOPIC TAGS: oxidation reduction reaction, diphenylamine

ABSTRACT: [German article] The transition potential of the indicator, the number of electrons participating in the oxidation-reduction mechanism, the reversibility of the indicator mechanism, and the absorption spectrum of the indicator were established and discussed. Two protons and two electrons participate in the oxidation process which yields violet-colored p-quinoidal compounds; no semiquinone was detected. The

Card 1/2

L 63681-65
ACCESSION NR: AT5021741

indicator performs reversibly in the 2-12 pH range; it is suitable within these limits for mildly oxidizing systems. Orig. art. has: 2 tables, 5 graphs, 2 formulas.

ASSOCIATION: Institut fur Allgemeine Chemie der Technischen Universitat, Budapest (Institute for General Chemistry at the Technical University)

SUBMITTED: 22May63 ENCL: 00 SUB CODE: OC, GC

NR REF SOV: 000 OTHER: 009 JPRS

Card 2/2

L 03677-65

ACCESSION NR: AT5021747 HU/2502/64/041/01-/0109/0122

AUTHOR: Erdey, Laszlo (Erdei, L.)(Doctor, Professor)(Budapest); Paulik, Ferenc; Buzach-Gere, Eva (Buzag, E.)Budapest); Polos, Laszlo (Polosh, L.)

TITLE: Derivatographic and electron-microscopic examination of barium sulfate precipitates. Part 2

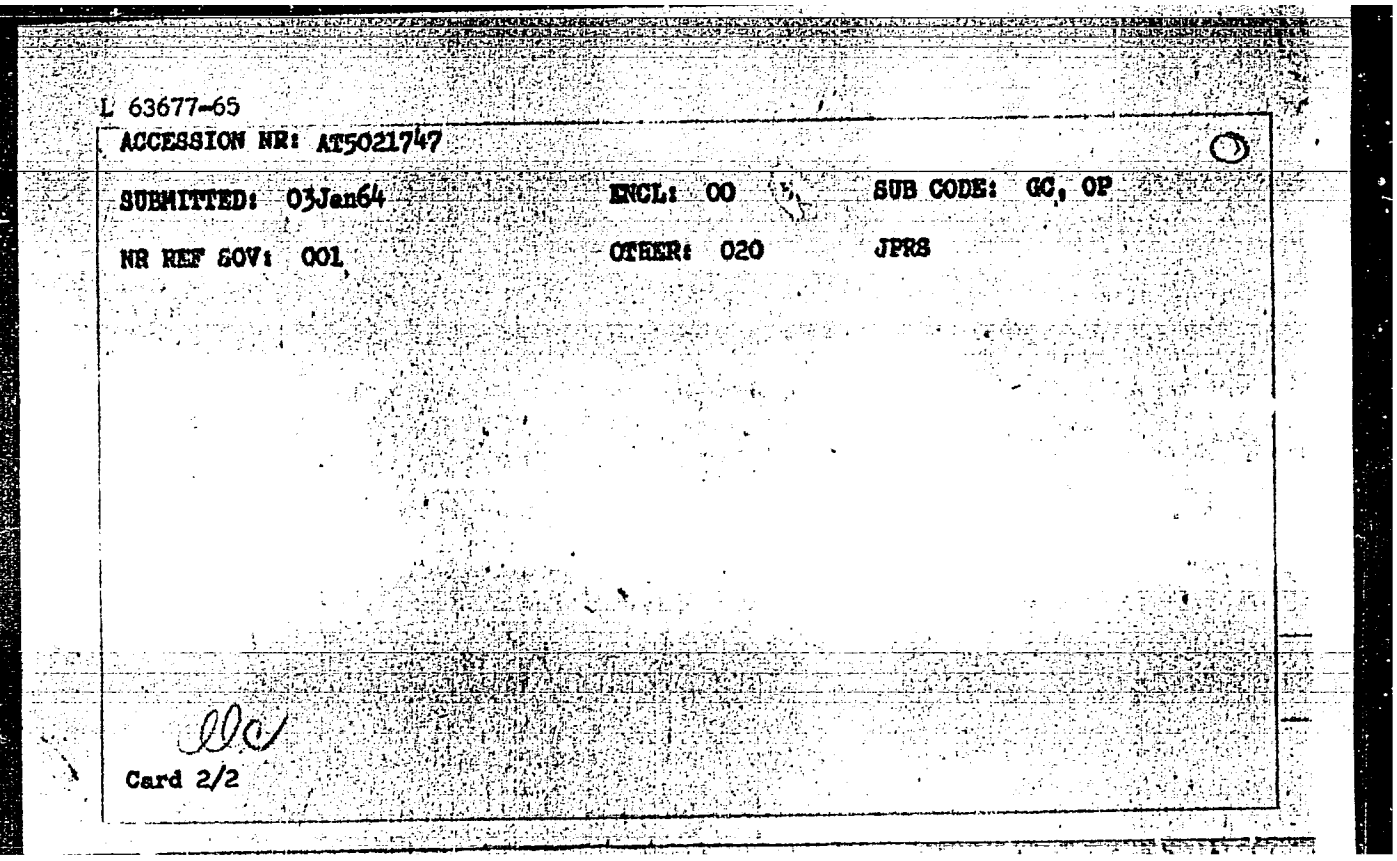
SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 41, no. 1-2, 1964, 109-122

TOPIC TAGS: chemical precipitation, barium compound, sulfate, electron microscopy

ABSTRACT: Barium sulfate precipitates obtained in various analytical precipitations were examined by derivatography and electron microscopy. Pure barium sulfate was obtained only from ver dilute solutions even after all volatile impurities were eliminated by calcination. Eighteen electron micrographs and 9 derivatographic curves were presented and discussed. Orig. art. has: 27 figures, 1 table.

ASSOCIATION: Institut fur allgemeine Chemie der Technischen Universitat, Budapest (Institute for General Chemistry, Technical University)

Card 1/2



L 63677-65

ACCESSION NR: AT5021747

SUBMITTED: 03Jan64 ENCL: 00 SUB CODE: GC, OP

NR REF SOV: 001 OTHER: 020 JPRS

Card 2/2

L 63899-65 EPF(c)/EWP(j) RM

ACCESSION NR: AT5022529 HU/2502/64/042/002/0131/0144

AUTHOR: Csuros, Zoltan (Chyuryesh, Z.)(Professor, Doctor)(Budapest); Duesa, Zsigmond (Dusa, Zh.)(Budapest); Petro, Jozsef (Petro, Y.)(Doctor)(Budapest); Erdey, Laszlo (Erdei, L.)(Professor, Doctor)(Budapest); Paulik, Ferenc (Budapest)

TITLE: Investigations on catalysts. Part 40: Investigations on Raney-nickel catalysts. Section 15: Effects of the alkali used as extractant and of the hydrogen content on the activity

SOURCE: Academiae scientiarum hungaricae. Acta chimica, v. 42, no. 2, 1964, 131-144

TOPIC TAGS: nickel, catalysis, hydrogen, basic catalysis

ABSTRACT: A derivatographic method was developed for the study of pyrophoric catalysts such as those from Raney-nickel. The method was applied to catalysts prepared by using various solvents such as sodium hydroxide, potassium hydroxide, and sodium carbonate solutions. Catalysts prepared by using KOH or NaOH contained relatively high quantities of hydrogen and the hydrogen content was in proportion to their nickel content. However, no relation was evident between the catalyst's composition and its effectiveness. Orig. art. has 1 graph and 4 tables.

Card 1/2

L 63899-65

ACCESSION NR: AT5022529

ASSOCIATION: Institute of Organic Chemical Technology, Technical University, Budapest; Institute of General Chemistry, Technical University, Budapest

SUBMITTED: 10Feb64 ENCL: 00 SUB CODE: GC

NO REF SOV: 002 OTHER: 012 JPRS

Card 2/2

KOCSIS, Elemer; [illegible], Laszlo

Examination of the adaptability of [illegible] to spectrometers. Gep 17 no.1 [illegible]

1. Chair of General Chemistry of Budapest Technical University.

INCZEDY, Janos, dr. (Budapest, XI., Gellert ter 4); NEMESHEGYI, Gabor (Budapest, XI., Gellert ter 4); ERDEY, Laszlo, prof., dr. (Budapest, XI., Gellert ter 4)

Separation and determination of rare earth metals by ion exchange chromatography. Pts.1-2. Acta chimica Hung 43 no.1:1-15 '65.

1. Institute of General Chemistry of Budapest Technical University.
Submitted July 2, 1964.

L 63187-65
ACCESSION NR: AT5021755

HU/2502/64/041/01-/0187/0194

AUTHOR: Khalifa, H. (Kalifa, Kh.)(Doctor)(Giza); Erdey,Laszlo(Erdei, L.)(Doctor, Professor)(Budapest); Svehla, Gyula (Shvekhla,D'.)(Doctor)(Budapest)

TITLE: Accuracy of silver determinations by atomic absorption methods

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 41, no.1-2, 1964, 187-194

TOPIC TAGS: silver, spectrophotometry, chemical detection

ABSTRACT: The optimum experimental conditions for the determination of silver by atomic-absorption spectrophotometry were determined and various calibration curves were presented. Foreign metals did not interfere with the determinations. The errors of the determinations in various concentration ranges (varying from 10 to 1300 p.p.m.) were established and presented in tables. Orig.art. has: 7 tables, 2 figures, 1 formula.

ASSOCIATION: Institute of General Chemistry, Technical University, Budapest

SUBMITTED: 22Jan64 ENCL: 00 SUB CODE: IC,NP
NR REF SOV: 000 OTHER: 004 JPRS

Card 1/1

L 63899-65 EPF(c)/EWP(j) RM

ACCESSION NR: AT5022529 HU/2502/64/042/002/0131/0144

AUTHOR: Csuros, Zoltan (Chyuryesh,Z.)(Professor, Doctor)(Budapest); Dusza, Zsigmond (Dusa, Zh.)(Budapest); Petro, Jozsef (Petro, Y.)(Doctor)(Budapest); Erdey, Laszlo (Erdei, L.)(Professor, Doctor)(Budapest); Paulik, Ferenc (Budapest)

TITLE: Investigations on catalysts. Part 40: Investigations on Raney-nickel catalysts. Section 15: Effects of the alkali used as extractant and of the hydrogen content on the activity

SOURCE: Academiae scientiarum hungaricae. Acta chimica, v. 42, no. 2, 1964, 131-144

TOPIC TAGS: nickel, catalysis, hydrogen, basic catalysis

ABSTRACT: A derivatographic method was developed for the study of pyrophoric catalysts such as those from Raney-nickel. The method was applied to catalysts prepared by using various solvents such as sodium hydroxide, potassium hydroxide, and sodium carbonate solutions. Catalysts prepared by using KOH or NaOH contained relatively high quantities of hydrogen and the hydrogen content was in proportion to their nickel content. However, no relation was evident between the catalyst's composition and its effectiveness. Orig. art. has 1 graph and 4 tables.

Card 1/2

L 63899-65

ACCESSION NR: AT5022529

ASSOCIATION: Institute of Organic Chemical Technology, Technical University, Budapest; Institute of General Chemistry, Technical University, Budapest

SUBMITTED: 10Feb64 ENCL: 00 SUB CODE: GC

NO REF SOV: 002 OTHER: 012 JPRS

Card 2/2

L 1179-66

ACCESSION NR: AT5025201 HU/2502/64/042/004/0379/0382

AUTHOR: Liptay, Gyorgy (Doctor)(Budapest); Hegyaljai Kiss, Geza (Doctor)(Budapest); Erdey, Laszlo (Professor, Doctor)(Budapest)

TITLE: Investigation by thermal analysis of the pyrolytic dehydrogenation of sterols

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 42, no. 4, 1964, 379-382

TOPIC TAGS: thermal analysis, pyrolysis, dehydrogenation, alcohol

Abstract: [English article] The pyrolytic decomposition of $\Delta^{1,4}$-androstadiene-3,17-dione and of $\Delta^{1,4,6}$-androstratriene-3,17-dione was investigated by thermal analysis employing the Orion GYEM 676 type derivatograph. The curves obtained indicated that the splitting temperature of the angular methyl group is not affected by the presence of the unsaturated B-ring, and the first-mentioned compound pyrolyzed at a higher exothermic rate. Orig. art. has 4 formulas and 2 figures.

ASSOCIATION: Department of General Chemistry, Technical University, Budapest; Chinoin Factory of Pharmaceutical and Chemical Products, Budapest

SUBMITTED: 12May64 ENCL: 00 SUB CODE: OC, GC
NO REF SOV: 000 OTHER: 008 JPRS
Card 1/1

L 41682-66 EWP(t)/ETI IJP(c) JD/JG

ACC NR: AT6031101 SOURCE CODE: HU/2502/65/043/002/0095/0100

AUTHOR: Erdey, Laszlo--Erdei, L. (Professor; Doctor); Kasa, Imre--Kasha, I. (Doctor); Kovacs, Laszlo--Kovach, L.

ORG: Technical University of Budapest, Institute of General Chemistry; Frederic Joliot-Curie Institute of Radiation Biology, Budapest

TITLE: Investigation of the thermoluminescent properties of lithium fluoride 35 B+1

SOURCE: Academia scientiarum Hungaricae. Acta chimica, v. 43, no. 2, 1965, 95-100

TOPIC TAGS: lithium fluoride, thermoluminescence

ABSTRACT: Changes in the thermoluminescent properties of lithium fluoride which take place on the effect of different factors were investigated. Thermoluminescence was found to depend on the nature of the lithium compound which served as an initial substance for the preparation of lithium fluoride. The same physical influences had different effects on lithium fluoride preparations obtained from various starting materials. Thermoluminescence was markedly increased by the addition of calcium fluoride. The authors thank Grad.-Engr. O. Roka for construction of the measuring device and for assistance with the measurements. Thanks are also given to Grad.-Engr. E. Kocsis for the spectrographic analysis. Orig. art. has: 4 figures and 1 table. /JPRS: 33,540/

SUB CODE: 07, 20 / SUBM DATE: 20Feb65 /ORIG REF:001 / SOV REF:001 / OTH REF:014

Card 1/1 af

0918 2321

L 47233-66 LIP(c)
ACC NR: AT6034307 SOURCE CODE: HU/0005/66/000/006/0268/0269

AUTHOR: Erdey, Laszlo; Kantor, Tibor

37B

ORG: Academic Research Group of Technical Analysis, Department of General Chemistry, Technical University, Budapest (Muszaki Egyetem, Altalanos-Kemiai Tanszek, Muszaki Analitikai Akademiai Kutato Csoport)

TITLE: Continuous introduction of powdered substances into spectroscopic light sources

SOURCE: Magyar kemiai folyoirat, no. 6, 1966, 268-269

TOPIC TAGS: spectroscopy, spectroscopic analysis

ABSTRACT: A device is described which can be used for the continuous introduction of solid, powdered materials into arc and spark light sources. The substance is introduced through a tube-electrode with the aid of a crew spindle which is rotated at a constant speed by an electric motor. The "tube-electrode method" is simple and versatile, and can be applied in various spectroscopic analyses. Orig. art. has: 1 figure. [JPRS: 36,862]

SUB CODE: 20 / SUBM DATE: 26Sep65 / ORIG REF: 002 / OTH REF: 010

Card 1/1 hs

ERDEYNE SCHNEER, Anna

Some newer methods for rock and mineral analysis. Magy kem lap 19 no.6: 325-329 Je '64.

1. Research Group of Inorganic Chemistry, Hungarian Academy of Sciences, Budapest.

ERDEYNE SCHNEER, Anna, a kemiai tudomanyok kandidatusa

Newest results in ingoranic chemical qualitative analysis.
Kem tud kozl MTA 22 no.1:71-88 '64.

1. Chair of General Chemistry, Lorand Eotvos University, Budapest.

RADNOT, Magda; VEYNSHTEYN, P.[Weinstein, P.], doktor med.nauk,nauchnyy red.; CHAPODI I.[Csapodi, I], doktor med. nauk, nauchnyy red.; SIZA, Mario[Sziza, Mario, translator]; ERDI, K., otv. red.; CHERGE, I. [Csorgo, I.], tekhn. red.

[Atlas of eye diseases]Atlas glaznykh boleznei. Budapest, Akademiai Kiado. Vol.2. 1963. 199 p. (MIRA 15:12)

1. Chlen-korrespondent Akademii nauk Vengrii.
(EYE—DISEASES AND DEFECTS)

ERDEY-GRUZ, Tibor; MAJTHENYI, Lajos

Migration mechanism of hydrogen and hydroxyl ions. Pt. 5.
Magy kem folyoir 65 no. 5:167-174 My '59.

1. Eotvos Lorand Tudomanyegyetem Fizikai-Kemiai Tanszeke, Budapest.
2. "Magyar Kemiai Folyoirat" felelos szerkesztoje (for Erdey-Gruz).

ERDEY-GRUZ, Tibor; MAJTHENYI, Lajos

Migration mechanism of hydrogen and hydroxyl ions. Pt. 6.
Magy kem folyoir 65 no. 6:212-218 Je '59.

1. Eotvos Lorand Tudomanyegyetem Fizikai-Kemiai Tanszek, Budapest.
2. "Magyar Kemiai Folyoirat" felelos szerkesztoje (for Erdey-Gruz).

ERDEY-GRUZ, Tibor, dr., akademikus, egyetemi tanar (Budapest)

The fight and unity of the opposites in thermodynamics. Term tud kozl 5 no.2:65-66 F '61.

ERDEY-GRUZ, Tibor

In commemoration of the 250th anniversary of the birth of Mikhail Vasil'evich Lomonosov. Magy kem lap 16 no.12:529-530 D '61.

ERDEY-GRUZ, T. (Budapest); DEVAY, J. (Budapest)

Raising the depolarization of quicksilver electrodes by alternating current. Rev chimie 7 no. 1: 181-188 '62.

1. Lehrstuhl fur physikalische Chemie und Radiologie der Roland-Eotvos-Universitat; Elektrochemische Forschungsgruppe der Ungarischen Akademie der Wissenschaften, Budapest.

ERDEY-GRUZ, Tibor, dr.

Answers by Dr. Tibor Erdey-Grus, president of the Council of Science and Higher Education. Musz elet 17 no.24:3 22 N '62.

1. Tudomanyos es Felsooktatasi Tanacs elnoke.

ERDEY-GRUZ, Tibor; DEVAY, Jozsef; VAJASDY, Irma

Effect on sine currents on electrode processes.X. Effect of sine currents on the hydrogen overvoltage of platinum cathode. Magy kem folyoir 68 no.5:185-190 My '62.

1. Eotovos Lorand Tudomanyegyetem Fizikai-Kemiai es Radiologiai Tanszeke, Budapest, es Magyar Tudomanyos Akademia Elektrokemiai Kutato Csoportja, Budapest. 2. "Magyar Kemiai Folyoirat" felelos szerkesztoje (for Erdey-Gruz).

ERDEY-GRUZ, Tibor; DEVAY, Josef; SZEGEDI, Robert

Effect of sine currents on electrode processes. XI. Effect of alternating currents on the Hg-Zn corrosion in the case of the processes of mixed control. Magy kem folyoir 68 no.5:190-193 My '62.

1. Eotvos Lorand Tudomanyegyetem Fizikai-Kemiai Tanszeke, Budapest, es a Magyar Tudomanyos Akademia Elektrokemiai Kutato Csoportja, Budapest. 2. "Magyar Kemiai Foloyoirat" felelos szerkesztoje (for Erdey-Gruz).

ERDEY-GRUZ, Tibor; DEVAY, Jozsef; HORANYI, Gyorgy; VAJASDY, Irma

The effect of sinusoidal current on electrode processes.XII.
Magy kem folyoir 68 no.9:373-376 S '62.

1. Eotvos Lorand Tudomanyegyetem Fizikai-Kemiai es Radiologiai Tanszeke, Budapest, es Magyar Tudomanyos Akademia Elektrokemiai Kutato Csoportja. 2. "Magyar Kemiai Folyoirat" felelos szerkesztoje (for Erdey-Gruz).

SZABO, Zoltan, egyetemi tanar; POLINSZKY, Karoly, a kemiai tudomanyok doktora; MATOLCSY, Kalman, a kemiai tudomanyok kandidatusa; LEVAY, Gyula; NAGY, Ferenc, a kemiai tudomanyok doktora; BERECZ, Endre, a kemiai tudomanyok kandidatusa docens; KORACH, Mor, akademikus; LENGYEL, Sandor, a kemiai tudomanyok doktora; SCHAY, Geza, akademikus, egyetemi tanar; ERDEY-GRUZ, Tibor, akademikus

1. Problems of and experiences with coordinating the main task of the long-range research entitled "Investigation of the mechanism of chemical processes as well as the regularities of chemical industrial operations." Kem tud kozl MTA 20 no.2: 199-229 '63.

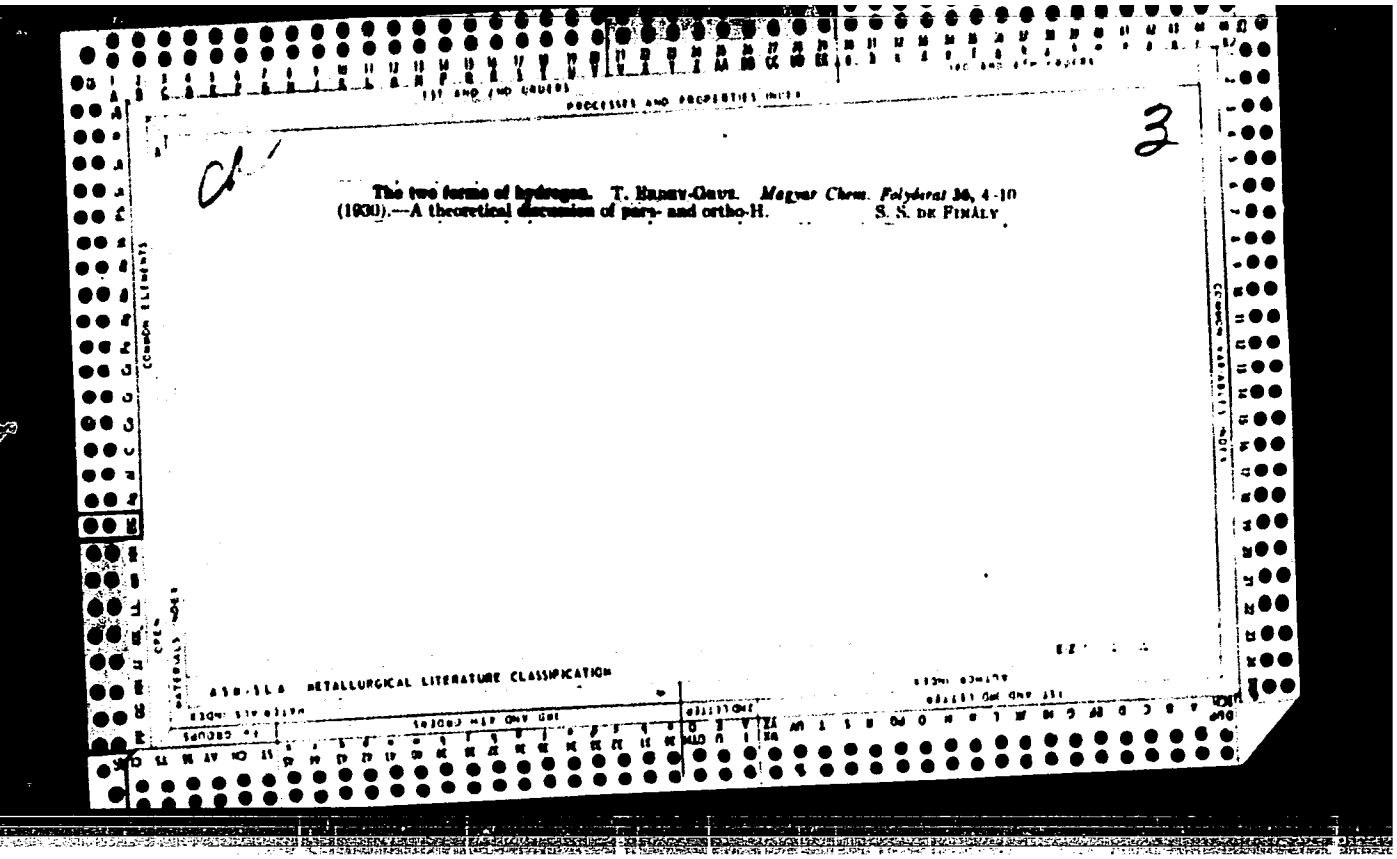
1. Magyar Tudomanyos Akademia levelezo tagja; "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkeszto bizottsagi tagha (for Szabo). 2. Veszpremi Vegyipari Egyetem rektora; "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkeszto bizottsagi tagja (for Polinszky). 3. Magyar Tudomanyos Akademia Kozponti Kemiai Kutato Intezete igazgatohelyettese (for Nagy). 4. Eotvos Lorand Tudomanyegyetem Fizikai Kemiai es Radiologiai Tanszeke. 5. Magyar Tudomanyos Akademia Muszaki Kemiai Kutato Intezetenek igazgatoja; "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkeszto bizottsagi tagja (for Korach). 6. Akademia Elektrokemiai Kutato Csoport vezetoje; "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkeszto bizottsagi tagja (for Lengyel).

(cont. on next card)

ERDEY-GRUZ, Tibor, akademikus

The state of natural sciences and the Hungarian national long-range scientific research plan. Magy tud 70 no.1:7-18 Ja '63.

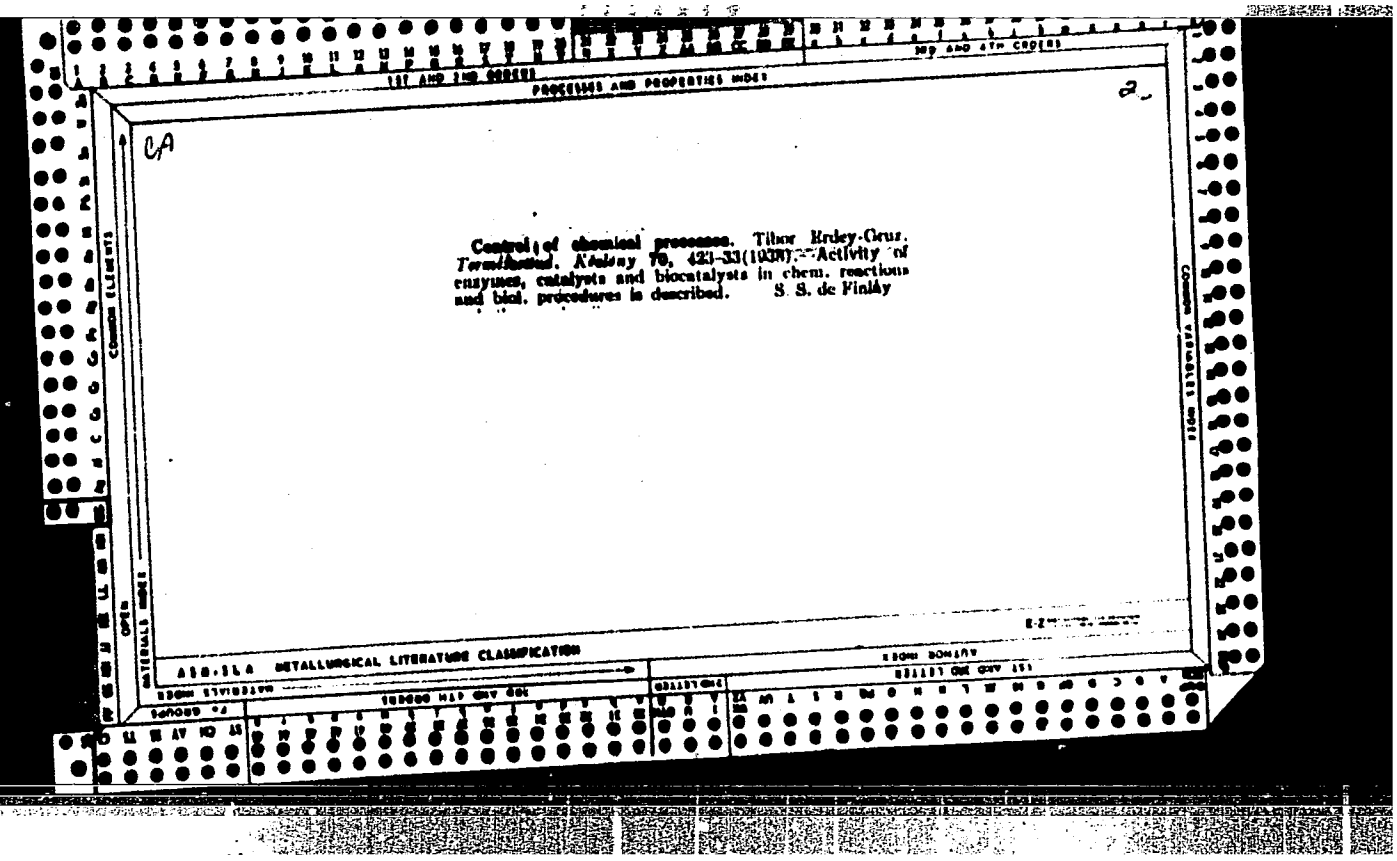
1. Tudomanyos es Felsooktatasi Tanacs elnoke.

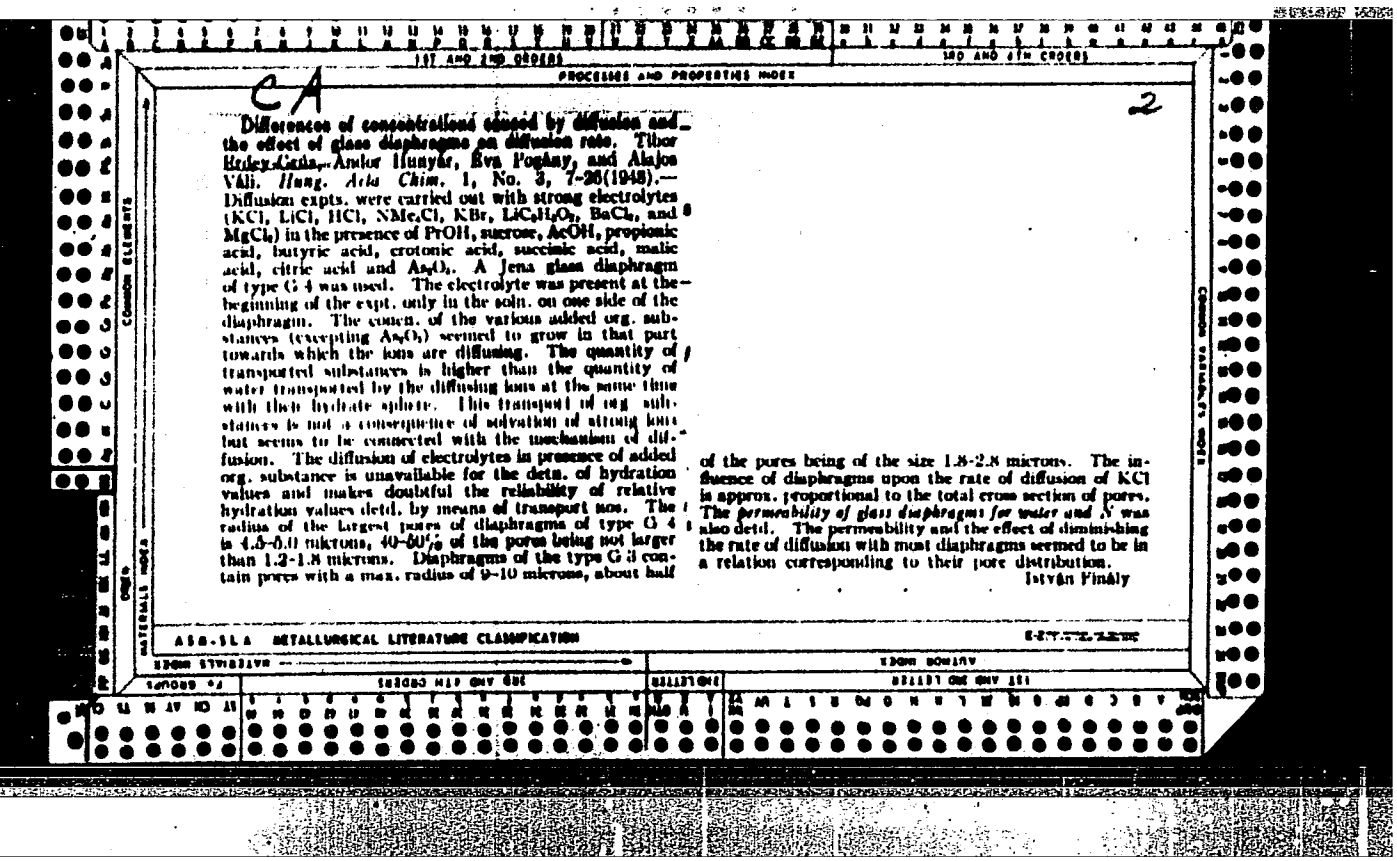


The two forms of hydrogen. T. Erdey-Grúz. *Magyar Chem. Folyóirat* 36, 4-10 (1930).—A theoretical discussion of para- and ortho-H. S. S. de Finály

3

METALLURGICAL LITERATURE CLASSIFICATION





CA

2

Difference of concentrations caused by diffusion and the effect of glass diaphragms on diffusion rate. Tibor Erdey-Grúz, Andor Ilkovits, Éva Pogány, and Alajos Vali. *Hung. Acta Chim.* 1, No. 3, 7-26(1948).—Diffusion expts. were carried out with strong electrolytes (KCl, LiCl, HCl, NMe$_4$Cl, KBr, LiC$_6$H$_5$O$_7$, BaCl$_2$, and MgCl$_2$) in the presence of PrOH, sucrose, AcOH, propionic acid, butyric acid, crotonic acid, succinic acid, malic acid, citric acid and As$_2$O$_3$. A Jena glass diaphragm of type G 4 was used. The electrolyte was present at the beginning of the expt. only in the soln. on one side of the diaphragm. The concn. of the various added org. substances (excepting As$_2$O$_3$) seemed to grow in that part towards which the ions are diffusing. The quantity of transported substances is higher than the quantity of water transported by the diffusing ions at the same time with their hydrate sphere. This transport of org. substances is not a consequence of solvation of attract ions but seems to be connected with the mechanism of diffusion. The diffusion of electrolytes in presence of added org. substance is unavailable for the detn. of hydration values and makes doubtful the reliability of relative hydration values detd. by means of transport nos. The radius of the largest pores of diaphragms of type G 4 is 4.5–5.0 microns, 40–60% of the pores being not larger than 1.2–1.8 microns. Diaphragms of the type G 3 contain pores with a max. radius of 9–10 microns, about half of the pores being of the size 1.8–2.8 microns. The influence of diaphragms upon the rate of diffusion of KCl is approx. proportional to the total cross section of pores. The *permeability of glass diaphragms for water and N* was also detd. The permeability and the effect of diminishing the rate of diffusion with most diaphragms seemed to be in a relation corresponding to their pore distribution.

István Finály

PROCESSES AND PROPERTIES INDEX

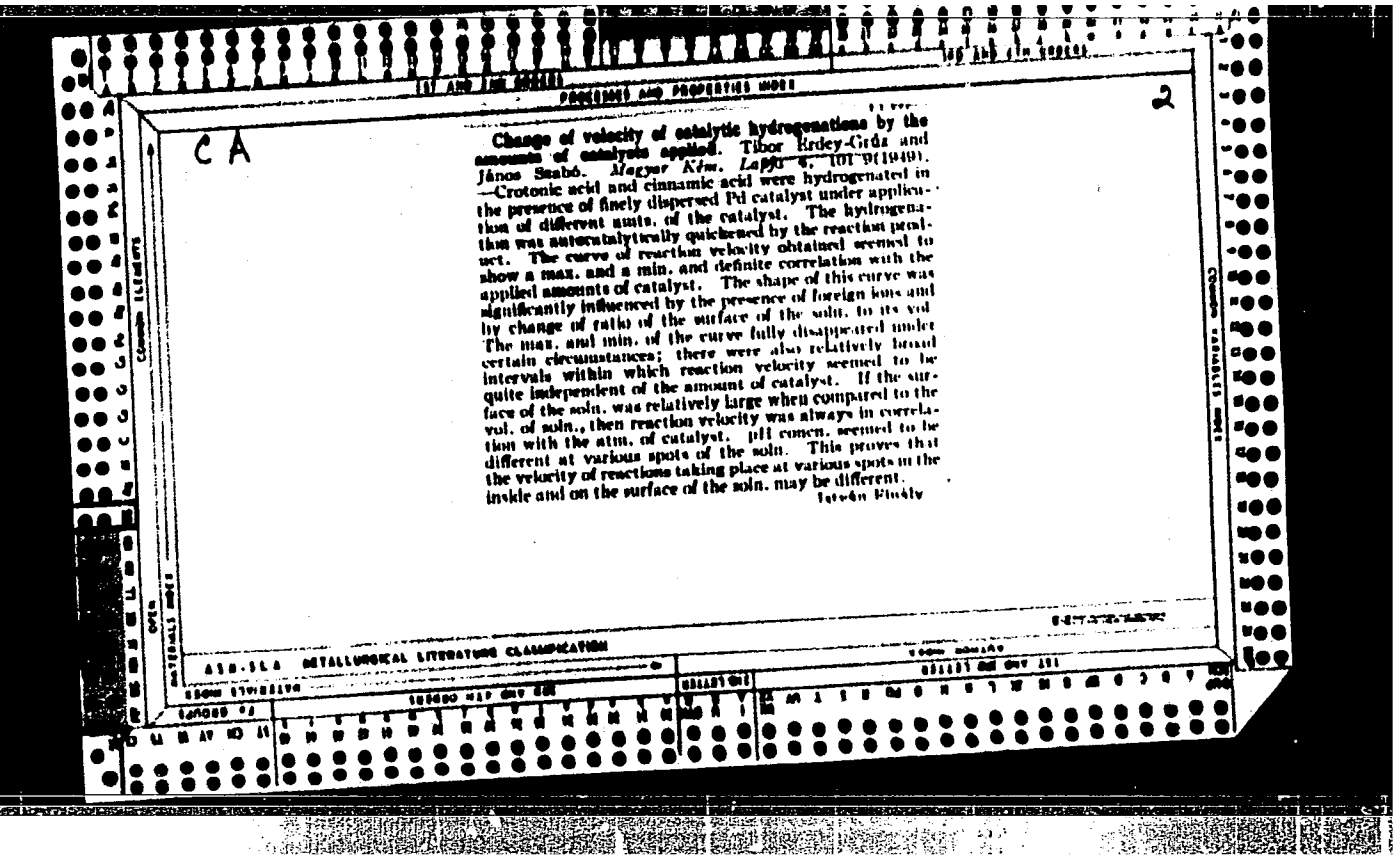
CA

2

A special case of diffusion of two components in the same solution. Tibor Erdey-Grúz and Attila Hunyár. *Hung. Acta Chim.* 1, No. 5, 27-35(1948). One part of a special diffusion app. was filled with a 1.0 *N* soln. of KCl contg. 5% propanol. The other part of the app. contained 5% propanol only, and both parts were sepd. from each other by a glass diaphragm. Then the amounts of KCl and propanol passed through the diaphragm within 1, 2, and 4 days were detd. The quotient of these amts. seemed to diminish as the time passed. The quantity of 5% propanol soln. apparently transported by 1 mol. of the KCl soln. is the largest at the beginning of diffusion; it then gradually decreases owing to rediffusion. The value for factor *f* obtained is 0.036. The measured value m_1/m_2 was 0.034 (1 day), 0.031 (2 days), and 0.024 (diffusion during 4 days).

István Finály

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



CA

2

Change of velocity of catalytic hydrogenations by the amounts of catalysts applied. Tibor Erdey-Grúz and János Szabó. *Magyar Kém. Lapja* 4, 101-9(1949). —Crotonic acid and cinnamic acid were hydrogenated in the presence of finely dispersed Pd catalyst under application of different amts. of the catalyst. The hydrogenation was autocatalytically quickened by the reaction product. The curve of reaction velocity obtained seemed to show a max. and a min. and definite correlation with the applied amounts of catalyst. The shape of this curve was significantly influenced by the presence of foreign ions and by change of ratio of the surface of the soln. to its vol. The max. and min. of the curve fully disappeared under certain circumstances; there were also relatively broad intervals within which reaction velocity seemed to be quite independent of the amount of catalyst. If the surface of the soln. was relatively large when compared to the vol. of soln., then reaction velocity was always in correlation with the atm. of catalyst. pH concn. seemed to be different at various spots of the soln. This proves that the velocity of reactions taking place at various spots in the inside and on the surface of the soln. may be different.

István Bíró

C.A.

Electrolysis of complex silver salt solutions. Tibor Erdey-Grúz and Valéria Horváthy (Univ., Budapest, Hung.). *Magyar Kém. Lapja* 4, 524-31(1949).—A device was constructed for the purpose of scratching the surface of a silver electrode during electrolysis. This electrode was prepd. from a thick wire by hammering it into a disklike shape. Solns. contg. various amts. of $AgNO_3$, $KAg(CN)_2$, and $Ag(NH_3)_2OH$ were electrolyzed and the mechanism of deposition of Ag on the cathode was studied. Gaseous N was bubbled through the solns. during electrolysis to inhibit the dissolving of Ag in the cyanide soln. The max. current ds. were detd. at which the Ag pptn. on the cathode still agreed with the law of Faraday, these values are called "limits" of 100% Ag pptn. ($I_{100\%}$). This limit was the highest in $AgNO_3$ solns. as compared to other solns. of identical concn., and the lowest in solns. of $Ag(NH_3)_2OH$. The value of $I_{100\%}$ increased parallel to the increase of Ag concn., but showed no alteration when KNO_3 or NH_4OH was added to the soln. at a given Ag concn. The addn. of excess KCN to a soln. of $KAg(CN)_2$ diminished the value of $I_{100\%}$. Increasing the temp. in the interval 0-20° increased the value of $I_{100\%}$ by about 1% for each degree centigrade. A correlation of the anodic-dissolving effect to the current d., similar to that of the cathode was observed. The numeric value of $I_{100\%}$ appeared somewhat higher for the anode. The presence of KNO_3, KCN, and NH_4OH increased the value of anodic $I_{100\%}$. The results of expts. show no significant differences between electrolytic pptn. of Ag from Ag ion hydrates present in simple solns. of Ag salts and electrolytic pptn. of Ag from complex ion solns. The mechanism of the process is the following: The ions are sepd. from the soln. by the force of the cathodic field, then they go to the surface of cathode, where they are neutralized. The Ag lost from the soln. by this pptn. is replaced by diffusion. The ion transfer due to the elec. current does not play a significant role in this respect. Calcns. based on these principles showed that the thickness of the layer between the surface of the cathode and the interior of the soln. must be about 10^{-3} cm. This is in accordance with results obtained in other fields. Diffusion actually transfers Ag in amts. corresponding to the cathodic current ds. up to the $I_{100\%}$ values. In the case of current ds. above this rate, the diffusion is unable to replace the full amt. of Ag required. Existence of anodic dissolving effects below 100% is probably due to a layer covering the surface of the anode with solid salts. It seems that this layer forms when the velocity of Ag soln. becomes greater than the velocity of diffusion between the produced salt and that portion of the soln. which is in immediate contact with the surface of anode, and the latter thus becomes oversatd. in respect to Ag compds.

I. Finály

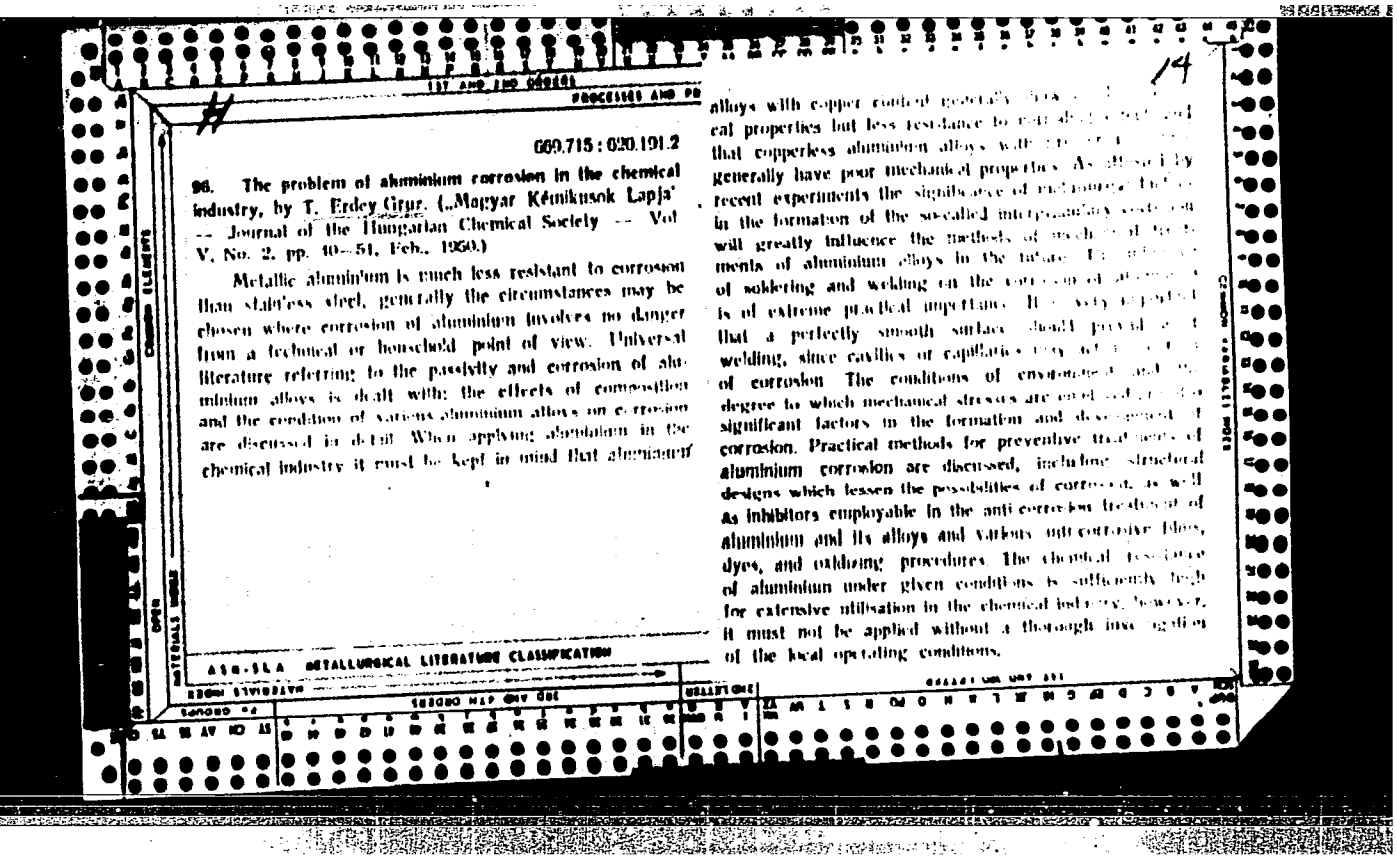
CA

4

Oscillographic analysis. The possibilities of a surface investigating method. Tibor Erdey-Grúz (Univ., Budapest) *Magyar Kém. Folyóirat* **56**, 83–7(1950).—The polarization capacity of a metallic surface depends on the condition of this surface and on the changes occurring thereon. The correlation of the polarization capacity with the changes in potential serves as a basis for detg. the conditions of the metallic surface and its changes, even when the surface area is unknown. For the dets. of polarization capacity the oscillographic method seemed to be suitable (*C.A.* 26, 1108). The oscillographic analysis of a Pt electrode in 1.0 *N* H_2SO_4 satd. with gaseous H showed that the potential increase from O potential to H potential is not linear. A sharp increase at the beginning is later followed by a steadier period, and ends with another sharp increase. The const. value was 0.85–0.90 v. more pos. than the H-potential, corresponding to the potential of PtO, the test affirming the formation of an oxide layer on the surface of the Pt electrode. Other examples show the suitability of the oscillographic method for the study of surface processes of metals. The classic electrochem. law states that in the event of several possible electrode processes the process with the min. pos. or neg. potential will occur. Oscillographic studies proved that this law should be applied with caution, since under certain conditions, processes requiring more pos. potentials may occur.

István Finály

1951



669.715 : 620.191.2

96. The problem of aluminium corrosion in the chemical industry, by T. Erdey Grúz. („Magyar Kémikusok Lapja" -- Journal of the Hungarian Chemical Society -- Vol V, No. 2, pp. 40—51, Feb., 1950.)

Metallic aluminium is much less resistant to corrosion than stainless steel, generally the circumstances may be chosen where corrosion of aluminium involves no danger from a technical or household point of view. Universal literature referring to the passivity and corrosion of aluminium alloys is dealt with; the effects of composition and the condition of various aluminium alloys on corrosion are discussed in detail. When applying aluminium in the chemical industry it must be kept in mind that aluminium

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alloys with copper content [illegible] physical properties but less resistance to [illegible] and that copperless aluminium alloys [illegible] generally have poor mechanical properties. As [illegible] recent experiments the significance of [illegible] in the formation of the so-called intercrystalline [illegible] will greatly influence the methods of [illegible] ments of aluminium alloys in the future. [illegible] of soldering and welding on the [illegible] is of extreme practical importance. It [illegible] that a perfectly smooth surface should prevail [illegible] welding, since cavities or capillaries may [illegible] of corrosion. The conditions of environment [illegible] degree to which mechanical stresses are [illegible] significant factors in the formation and development of corrosion. Practical methods for preventive treatment of aluminium corrosion are discussed, including structural designs which lessen the possibilities of corrosion, as well as inhibitors employable in the anti-corrosion treatment of aluminium and its alloys and various anti-corrosive films, dyes, and oxidising procedures. The chemical resistance of aluminium under given conditions is sufficiently high for extensive utilisation in the chemical industry; however, it must not be applied without a thorough investigation of the local operating conditions.

A S M - S L A METALLURGICAL LITERATURE CLASSIFICATION

ERDEY-GRUZ, T.

(1)

Oscillographic Analysis; Feasibility of a Method of Examining (Metal) Surfaces (Oszcillografikus Analizis; Egy Feluletvizsgalati Modszer Lehetosege). Tibor Erdey-Gruz. (Magyar Kemiai Folyoirat, No. 2, 1950, p. 83.) Gt. Brit., RAE Lib. Trans. 463, May, 1954. 10 pp. 16 refs.

181T21

HUNGARY/Chemistry - Catalysts

"Dependence of the Rate of Hydrogenation on the Quantity of Catalyst." in German, T. Erdey-Gruz, J. Szabo, Inst Phys Chem and Radiol Budapest U

"Acta Chimica Acad Sci Hungaricae" Vol I, No 1, pp 46-65

Exmd hydrogenation of crotonic and cinnamic acid in presence of finely divided palladium. Hydrogenation product has autocatalystic effect on the reaction. Rate of hydrogenation as function of catalyst quantity has max and min. It is affected by concn of soln, presence of foreign

181T2

HUNGARY/Chemistry - Catalysts (Contd)

ions, and changes in surface/vol ratio of so
and can even become independent of quantity
catalyst. If surface/vol ratio is large,
of hydrogenation will be proportional to
tity of catalyst.

ERDEY-GRUZ, TIBOR.

Elmeleti fizikai kemia (irtak) Erdey-Gruz Tibor es Schay Geza. 2. kiad. Budapest, Tankonyvkiado. (Egyetemi tankonyv) (Theoretical and physical chemistry; a university textbook. 2d ed. illus., diagrs., graphs, indexes, tables)
Vol. 1. 1955. 619 p.

SO: Monthly Index of East European Accession (EEAI) LC. Vol. 7, No. 5, 1958

ERDEY-GRUZ, T. (Budapest)

Hungary

T. Erdey-Gruz, author of "Influence of cations upon oxygen overvoltage," presented at the 4th [redacted] Conference Conference, Moscow, 1-6 Octbber, 1956, Electrochemical

SOURCE: Program to the 4th International Conference on Electrochemistry, Moscow, 1-6 October 1956, Unclassified.

ERDEY-GRUZ, T.

Category : USSR/General Problems - Problems of Teaching A-3

Abs Jour : Ref Zhur - Fizika, No 2, 1957 No 2783

Author : Erdei-Gruz, Tibor
Title : Physics Teaching in Hungarian Schools

Orig Pub : Fizika v shkole, 1956, No 4, 51-53

Abstract : No abstract

Card : 1/1

ERDEY-GRUZ, T.

10. The rate of catalytic hydrogenations. T. Erdey-Gruz, K. Zimmer. *Magyar Kémiai Folyóirat*. Vol. 62, 1956, No. 9, pp. 302—308. 21 figs.

The rate of hydrogenation of cinnamic acid sodium salt was studied in aqueous solution in the presence of palladium catalyst on barium sulphate carrier. The rate of hydrogenation as a function of the amount of the catalyst is influenced by several factors. Increase of the degree of dispersion of the catalyst increases the difference between the maximum and minimum reaction rate, and increases the rate of the reaction near the maximum. By increasing the surface-volume ratio of the solution, a parallel increase of the rate of hydrogenation is obtained. Presence of other electrolytes produces various effects: some of them (KCl, $BaCl_2$) decrease, others (K_2SO_4, HCl, NaOH) increase or decrease the reaction rate depending on their concentration. If ammonium salts are present the rate of hydrogenation is independent of the amount of catalyst within a wide range. Reducing the pressure of hydrogen causes an almost proportional decrease of the reaction rate. An interpretation of the empirical connection between hydrogenation rate and amount of catalyst is attempted.

ERDEY-GRUZ T.

B-13

HUNGARY/Physical Chemistry - Surface Phenomena. Adsorption. Chromatography. Ion Exchange.

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 24356

Author : Erdey-Gruz T., Nagy F.

Inst : Hungarian Academy of Sciences.

Title : Adsorption of Ethylene at Activated Carbon in Water Suspension.

Orig Pub : Acta chim. Acad. sci. hung., 1957, 12, No 1, 101-114

Abstract : Detailed description of a unit, designed by the authors, for recording of adsorption isotherms (AI) by the volumetric method at a constant pressure, which is also suitable for determination of AI and adsorption kinetics of adsorbents suspended in water. Over the range of 0-500 mm Hg were recorded AI of ethylene at dry, activated wood charcoal (I; 18.6, 20.0 and 25.0°) with a specific

Card 1/2

Erdey, L.

Distr: 4E2c

Oxidation-reduction titrations in nonaqueous media. Laszlo Erdey and Gyorgy Rády (Tech. Univ., Budapest). *Acta Chim. Acad. Sci. Hung.* 15, 81-93(1958)(in German). —By using ascorbic acid solns. as the reductant it is possible to det. Br, Au(III), and Hg(II) by potentiometric titration in glacial AcOH. ICl, KMnO4, Cr(VI), and V(V) can also be titrated by using ascorbic acid solns. as reductant but the stoichiometry of these reactions was not detd. The end points are indicated by reproducible potential changes in all cases, an abrupt change of 150 to 500 mv. being observed in those systems suitable for detn. Pt and satd. aq. calomel electrodes were used, and the diffusion potential was neglected.

Mark M. Jones

TH 1/11

10/

L. Erdey

Distr: 4E2c/4E3d/4E2c(j

17

Decomposition of hydrogen peroxide in an alkaline solution in the presence of a copper citrate complex. L. Erdey and J. Inczédy (Tech. Univ., Budapest). *Acta Chim. Acad. Sci. Hung.* 17, 93-111(1958)(in German).—A study of H_2O_2 decompn. in alk. soln. showed that on increasing pH values in the presence of a Cu^{++}-citrate complex the rate of decompn. rises linearly, whereas in pure alk. soln. there is a max. at pH 12. In the decompn. the homogeneous process is clearly discernible from the much slower process of O development on the walls. The HO_2 radical and intermediates of a brown Cu peroxy compd. (I) play a role in the homogeneous process. The rate of the over-all process is detd. by stationary I concns. and the concn. of perhydroxyl ions. When the initial mole ratio of H_2O_2 and Cu^{++} ions exceeds 100, the stationary concn. of I is stable at a larger interval, within which a 1st-order reaction is observed. The const. stationary concns. are approx. independent of pH and of H_2O_2 concn. The activation energy of decompn. is 12 kcal./mole. Perhydroxyl ions are dominant in the decompn. and their activity is reduced by undissocd. H_2O_2 mols. The homogeneous process is nearly independent of glass surface area in contact with the soln., but the rate of O development is proportional to surface area and, at high surface/vol. ratios, can approach the rate of decompn.

M. J. D. Low

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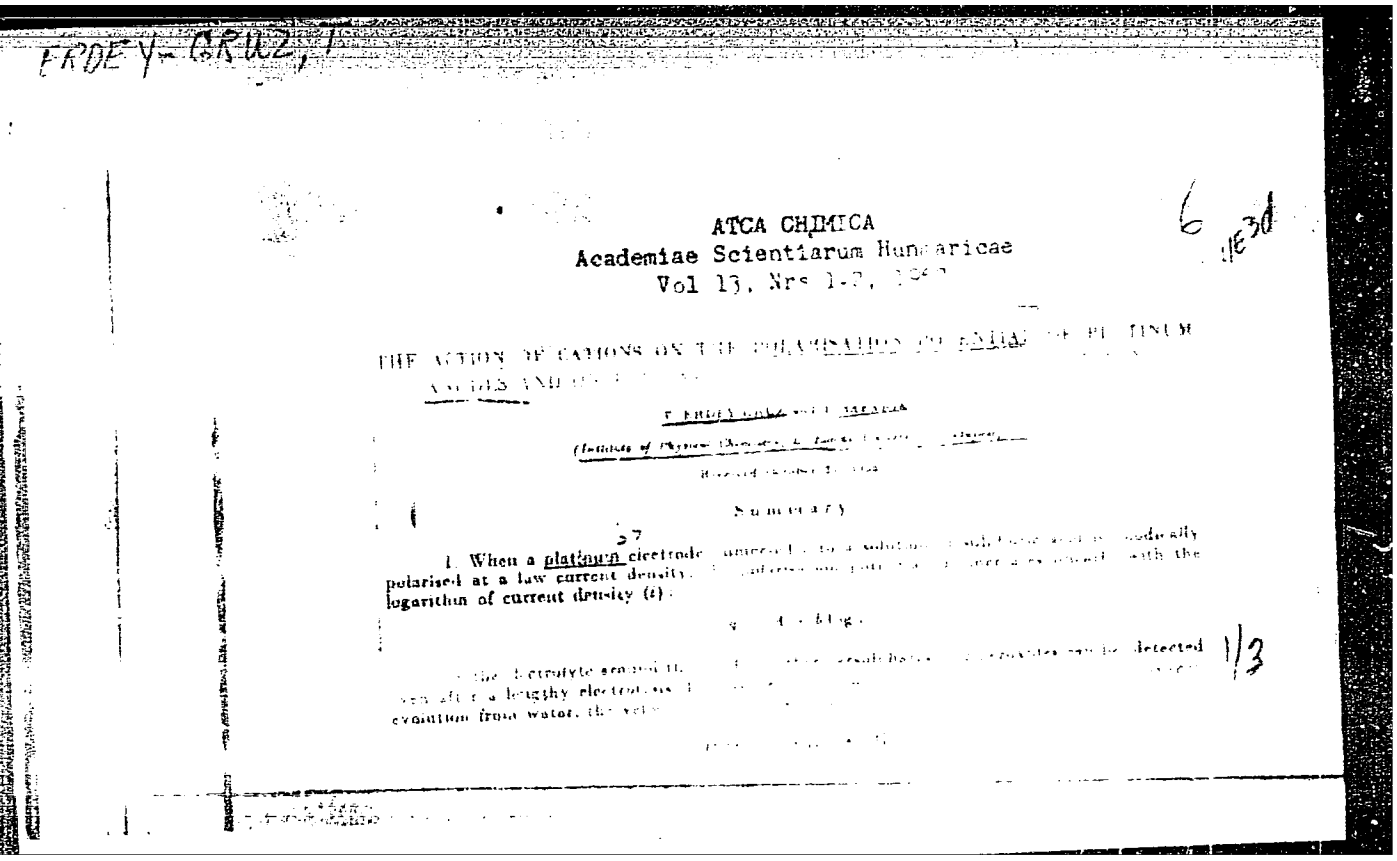

ERDEY-CRUZ, I.

ATCA CHIMICA
Academiae Scientiarum Hungaricae
Vol 13, Nrs 1-2, 1957

THE ACTION OF CATIONS ON THE POLARISATION OF ANODIC OF PLATINUM ANODES AND ON

Summary

1. When a platinum electrode

polarised at a low current density

logarithm of current density (i).

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On raising the current density above 10^{-2}—10^{-1} amp./sq. cm (at an anodic potential of about $\varphi = +2{,}0$ V), the polarisation potential rapidly increases, and the course of reaction alters in that persulphates are gradually formed begins in solutions of higher concentration.

2. In pure solutions of sulphuric acid of 2,0 *N* and above this concentration, the polarisation potential of the anode increases at a low current density approximately linear with the concentration. Parallel to the increase of polarisation potential, the value of *b* rises from 0,106 (in a 2,0 *N* solution) to 0,139 (in a 9,0 *N* solution of sulphuric acid).

3. When the sulphates of different metals are dissolved in a solution of sulphuric acid, the polarisation potential of the anode becomes more positive (compared at an identical current density) even at an unchanged total concentration of electrolyte or at an unchanged concentration of sulphuric acid. Referring to their action on increasing polarisation, the sequence of the metal cations examined proved to be as follows: $K^+ > Al^{3+} > NH_4^+ > Zn^{2+} > Na^+ > Mg^{2+} > Li^+$. By rising polarisation potentials, also the value of *b* increases from 0,106 to 0,135 in a 2,0 *N* solution. Metal cations showed similar action in a 9,0 *N* solution of sulphuric acid.

2/3

4. In solutions of pure salts of the metals examined, the correlation of the change of polarisation potential with the nature of the cation was similar to those observed in the presence of sulphuric acid.

5. K^+ ions, with the increase of polarisation potentials, showed an action of depolarising character both in the case of smooth and platinated platinum electrodes, and on nickel electrodes.

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6. The action of increasing polarisation (measured at a low constant current intensity) showed an approximately linear correlation with the logarithm of the concentration of K^+'s

7. To interpret the increase of polarisation potentials caused by metal cations, the authors presume that metal cations are adsorbed in the diffuse portion of the double layer, by the ions SO_4^{--} and HSO_4^-, which are directly adsorbed by the electrode surface. Metal cations, bound this way, alter the linkage of water molecules adsorbed by the electrode surface with other water molecules, and deform the latter in that that the activation energy of the electron leap from the water molecules to the electrode rises. Consequently, the electrode process becomes slower and, respectively, higher polarization potential is required to maintain a given rate (current density).

ERDEY-GRUZ T.

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ACTA CHIMICA
Academiae Scientiarum Hungaricae
Vol 13, Nrs 1-2, 1957

EFFECT OF ALTERNATING CURRENT ON THE OVERPOTENTIAL OF OXYGEN ON PLATINUM ANODE IN SOLUTIONS OF SULPHURIC ACID

T. ERDEY-GRUZ and J. SAFARIK

(Institute of Physical Chemistry, L. Kossuth University, Budapest)

Received December 2, 1956

Summary

The changes of the polarisation potential of a platinum anode (against a normal hydrogen electrode of φ v.) under the action of alternating current superimposed to direct current, were examined in a 3,0 *N* and 9,0 *N* solution of sulphuric acid. [illegible] current was observed, the strength of which [illegible] current density of direct current polarisation [illegible] sulphuric acid.

The polarisation curves ($\varphi = A + b \log i$) proved to be linear with few exceptions, when working in the interval of oxygen evolution, and at low current densities (Fig. 1, 4). In a 3 *N* solution the value of b slightly increases under the [illegible] current in a 9,0 *N* solution, however, [illegible] of 50—1000 Hz, the value of b significantly [illegible] with direct current. When the frequency of [illegible] of b did not appreciably change (Fig. 1).

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Alternating current of low frequency reduced polarisation in a 2,0 *N* solution of sulphuric acid by about 0,05 v. (Fig. 5, Table I), the minimum value of polarisation (and the maximum of depolarisation) appears at about 500—1000 Hz. Further rise [illegible] polarisation attains at about [illegible] ... [illegible] does not disappear [illegible]

[illegible] ... alternating current a reduced [illegible] can be observed at a current density of [illegible].

On the basis of the observed phenomena, it can be stated that the overpotential of oxygen evolution is reduced by a superposed alternating current. In other words, [illegible] of alternating current promotes the process of oxygen [illegible] ... formation of persulphate [illegible] ... taking place slower than [illegible]

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below that of reductions. However, at higher frequencies, the depolarizing action of alternating current decreases, due to the limited charging [illegible] the [illegible] reductions of high [illegible] and hydrosulphate ions, respectively [illegible] of higher [illegible]

The experiments show [illegible] acceleration of the rate of formation [illegible]

~~INDEX~~ ERDEY-GRUZ, Tibor

Distr: 4E4j 7

Speed of catalytic hydrogenation. Tibor Erdey-Grúz and Károly Zimmer (Lóránd Eötvös Univ., Budapest, Hung.). *Magyar Kém. Folyóirat* 62, 302-8(1957).—Rates of hydrogenation of Na cinnamate were measured in aq. soln. in the presence of Pd/C catalyst on $BaSO_4$ carrier. A great number of assumptions had to be made when attempting to explain the empirical correlation between rate and amt. of catalyst. Francis J. Schmidt

ERDEY-GRUZ, TIBOR

The effect of cations on the polarisation potential of platinum anodes and on the oxygen overvoltage. Tibor Erdey-Grúz and Imre Safarik (Eötvös Lorand Univ., Budapest). *Magyar Kém. Folyóirat* 63, 221–8 (1957).—The mechanism of the processes at the Pt anode in H_2SO_4 solns. of different concns. was investigated by studying the effects of Li^+, Na^+, K^+, NH_4^+, Mg^{++}, Zn^{++}, Al^{+++} ions on the polarization potential. The presence of metallic ions in the H_2SO_4 solns. resulted in increased polarization at the Pt anode and in increased slope of the Tafel lines. The same effect of K^+ ions was observed at platinized Pt and Ni electrodes. The effect on the anodic polarization was directly proportional (at const. c.d.) to the logarithm of the K^+ concn. The behavior of the cations was explained by adsorption in the diffuse part of the double layer increasing the activation energy of the electrolytic O evolution. —Saul Patai

ERDEY-GRÚZ, TIBOR

HUNGARY/Physical Chemistry - Electrochemistry. B-12

Abs Jour : Ref Zhur - Khimiya, No 7, 1958, 20777

Author : Tibor Erdey-Grúz, Imre Safarik.
Inst : -
Title : Influence of Alternating Current on Oxygen Overvoltage on Platinum Electrode in Sulfurinc Acid Solution.

Orig Pub : Magyar kém. folyórat, 1957, 63, No 9, 237-242

Abstract : The dependence of oxygen overvoltage on smooth Pt at i from 10^{-5} to 1 amp. per sq.cm in 2 n. H_2SO_4, as well as 9 n. H_2SO_4 on the frequency (ν) of an additionally superimposed alternating current (50 to 20,000 cycles) was studied. With the rise of ν, the potential of Pt passes (at a given i) through a minimum, the depth of which at i $=10^{-5}$ to 10^{-2} amp. per sq.cm is 0.05 to 0.06 v in the case of 2 n. H_2SO_4, and 0.32 to 0.36 v in the case of 9 n. H_2SO_4, and at i $=1$ amp. per sq.cm it drops to 0.003 v and zero correspondingly. The depolarizing action of the

Card 1/2

HUNGARY/Physical Chemistry. Electrochemistry. B

Abs Jour: Ref Zhur-Khim., No 15, 1958, 49711.

In solutions of KOH and KCl the minimun of (Λ, N) curves is flattened, is located in the interval N = 40-60%, and corresponds to the maximun of the (Λ, N) curve. With increasing N up to 80-90% the temperature coefficient (TC) of Λ of all three electrolytes increases, while at higher N -- it drops. TC of η, over a wide range of N, varies approximately linearly with increasing N, and only with very low contents of water and I the TC decreases sharply. Energy of activation of electric conductivity A (in kcal/mole in all instances) is about 2.3 in pure I. With increasing N up to 75-85% A increases, after that it drops. Maximun values of A: 4.6 for HCl, 5.1 for KOH, 4.6 for KCl. For η the A values increase with increasing N,

Card : 2/3

B

HUNGARY / Physical Chemistry. Electrochemistry.

Abs Jour : Ref Zhur - Khimiya, No 12, 1959, No. 41723

Author : Erdey-Gruz, T.; Majthenyi, L.
Inst : Hungarian AS
Title : The Transfer Mechanism of Hydrogen and Hydroxyl Ions. II. Transfer Numbers of HCl, KOH, KF and KCl in Water-Methanol Mixtures at Temperatures Ranging from 5-25°.

Orig Pub : Acta chim. Acad. scient. hung., 1958, 16, No 4, 417-438

Abstract : The transfer numbers n for HCl, KOH, KF and KCl were determined by the moving boundary method from a mixture of methanol (I) and water at temperatures ranging

Card 1/4

Abs Jour : Ref Zhur - Khimiya, No 12, 1959, No. 41723

raised. From the electroconductivity data published earlier (R. Zh. Khim, 1959, No 5, 14759), and the values of n obtained, the ion mobility λ, expression $\lambda \cdot \eta$ (η - viscosity), and temperature coefficients of the mobility (TCM) were calculated. TCM dependence on the solvent's water content passes through a maximum for all ions. The greatest maximum was observed with F^- and the smallest for H^+ ions. Maxima on TCM-composition, and η-composition curves were observed at identical compositions for H_3O^+ and OH^- ions, while those for K^+, Cl^- and F^- occurred at different compositions. K^+ ion mobility was the same in KOH, KF and KCl solutions,

B

HUNGARY/Physical Chemistry. Electrochemistry.

Abs Jour: Ref Zhur-Khim., No 5, 1959, 14759.

Author : Erdey-Gruz T., Hajthenyi L.
Inst :
Title : The Mechanism of Movement of Hydrogen and Hydroxyl Ions. II. The Transfer Numbers of HCl, KOH, KCl and KF in Methanol-Water Mixtures at 5 and 25°.

Orig Pub: Magyar kem. folyoirat, 1958, 64, No 6, 212-220.

Abstract: The transfer numbers (TN) of HCl, KOH, KCl and KF in methanol (I) - water mixtures of various compositions have been measured at 5 and 25°. The TN in the case of HCl and KOH strongly depend on the water content in the mixture; in the case of KCl and KF - they are insignificant. The TN of H+,

Card : 1/3

ERDEY-GRUZ, T., MAJHENYI, L.

Mechanism of migration of hydrogen and hydroxyl ions. V. Effects of the composition of ethanol and water oh the transference numbers and ion mobilities of dissolved LCL, KOH, KF AND KCI at 5 and 25 C. In German, p. 73

ACTA CHIMICA. Budapest, Hungary, Vol. 20, No. 1, 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 9, No. 2 Feb. 1960
Uncl.

ERDEY-GRUZ, T.; MAJTHENYI, L.

Mechanism of migration of hydrogen and hydroxl ions. VI. Effect of the temperature and composition of glycol-water mixture on the transference numbers and ion mobilities of dissolved HCI, KOH, KF and KCI at 5° and 25° C.

ACTA CHIMICA. (Magyar Tudomanyos Akademia) Budapest, Hungary. Vol. 20 No. 2, 1959

Monthly Lists of East European Accessions, (EEAI) LC, Vol. 9, No. 1, 1960

Uncl.

ERDEY-GRUZ, Tibor; KUGLER, Elvira; HIDVEGI, Judit

Migration mechanism of hydrogen and hydroxyl ions. Pt. 3. Magy kem folyoir 65 no.3:114-123 Mr '59.

1. Eotvos Lorand Tudomanyegyetem Fizikai-Kemiai Tanszeke, Budapest.
2. "Magyar Kemiai Folyoirat" felelos szerkesztoje (for Erdey-Gruz).
3. "Magyar Kemiai Folyoirat" szerkesztosegi titkara (for Kugler).

ERDEY-GRUZ, T.; KUGLER, E.; HIDVEGI, J.

Mechanism of the migration of the hydrogen and hydroxyl ions. IV. Effect of the constitution of glycol-water mixtures on the conductivity of dissolved hydrochloric acid, potassium hydroxide, potassium fluorite, and potassium chloride as well as their viscosity at 5° and 25°C. p. 152.

MAGYAR KEMIAI FOLYOIRAT. Budapest, Hungary. Vol. 65, no. 4, Apr. 1959

Monthly List of East European Accessions (EEAI), LC. Vol. 8, No. 9, September 1959
Uncl.

ERDEY-GRUZ, Tibor, r.tag (Budapest)

An account made by the Section's leadership; also, remarks by Gyula Hardy and others. Kem tud kozl MTA 14 no.2:141-175 '60. (EEAI 10:2)

1. Osztalytitkar, Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalya, Budapest.
(Hungarian Academy of Sciences) (Hungary--Chemistry)

ERDEY-GRUZ, Tibor, akademikus (Budapest)

Transition of quantitative changes into qualitative ones as seen by a chemist. Magy tud 67 no.8:467-484 Ag '60. (EEAI 9:11)
(Chemistry)

ERDEY-GRUZ, Tibor, akademikus (Budapest)

Quantitative changes turning into qualitative ones, as seen by the chemist. II. Magy tud 67 no.9:529-543 S '60. (EEAI 9:12)
(Chemistry) (Gases) (Heat)
(Molecules) (Solutions)

ERDEY-GRUZ, Tibor, akademikus (Budapest)

High-level and up-to-date teaching in the institutions of higher education. Magy tud 67 no.12:711-715 D '60. (EEAI 10:3)
(Hungary--Universities and colleges)

ERDEY-GRUZ, Tibor, egyetemi tanar (Budapest)

Modern science and religion; the voice of natural sciences. Munka 11 no.1:20-21 Ja '61.

(Religion and science)

ERDEY-GRUZ, Tibor, akademikus (Budapest); CHOLNOKY, Laszlo; SZABO, Zoltan; SZEKER, Gyula, kandidatus; FOLDI, Zoltan; LANGYEL, Sandor, a tudomanyok doktora; TAKACS, Pal, kandidatus

An account of the 1960 work of the Section of Chemical Sciences, Hungarian Academy of Sciences. Kem tud kozl MTA 15 no.4:401-460 '61.

1. Osztalytitkar, Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalya, Budapest es Szerkeszto, Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei(for Erdey-Gruz) 2.Lev.tag, Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei(for Cholnoky, Szabo, Foldi) 3.Szerkesztobizottsagi tag, Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei(for Lengyel)

(Hungarian Academy of Sciences) (Hungary—Chemistry)

ERDEY-GRUZ, Tibor, dr.

Fight and unity of antitheses as seen by a chemist. Magy kem lap 16 no.4:147-155 Ap '61.

1. Eotvos Lorand Tudomany Egyetem Fizikai Kemiai es Radiologiai Intezete, Budapest.

ERDEY-GRUZ, Tibor, Kossuth-dijas akademikus

Mass and weight. Elet tud 16 no.16:500-501 16 Ap '61.

ERDEY-GRUZ, Tibor, Kossuth-dijas akademikus

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